

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

COMPLETE LISTING OF THE CLAIMS:

Claims 1-8 : (Canceled)

Claim 9 : (Previously Presented) A communications system

comprising: a communications network comprising network nodes and network links between the network nodes; and a network management system for allocating connections to the network, the connections utilizing the network nodes and the network links; in respect of each said connection, there being a number of possible ways to implement the connection in the network; the network management system including a network state store which maintains a continuously updated record of current network usage, and the network management system storing which current network connections are reconfigurable and which are not; the network management system, when allocating the connection to the network, selecting one of the number of possible ways to implement the connection by at least examining the network state store; the network management system, when deciding whether to accept or reject a request for the connection in the network, having an option to accommodate the request for the connection over the network by reconfiguring existing connections in the network by selecting, in respect of at least one existing connection to be reconfigured, a different one of the number of possible ways to implement the at least one existing connection; the reconfiguration by the network management system being constrained to a set of possible reconfigurations which is a subset of the set of all possible reconfigurations of the existing connections in the network, said subset being defined by those reconfigurations that can be carried

out with no interruption or impairment of service, or unimportant interruption or impairment of service.

Claim 10 : (Previously Presented) The communications system according to claim 9, wherein the existing connections in the network comprise reconfigurable and unreconfigurable connections, and the reconfiguration by the network management system is constrained to reconfiguration of only the reconfigurable connections.

Claim 11 : (Previously Presented) The communications system according to claim 10, wherein the network management system reconfigures a reconfigurable connection by changing one of a wavelength on which the connection is made and a route taken by the connection.

Claim 12 : (Previously Presented) The communications system according to claim 10, wherein the network management system reconfigures a reconfigurable connection by changing a wavelength on which the connection is made.

Claim 13 : (Previously Presented) The communications system according to claim 9, wherein the reconfiguration by the network management system is constrained such that each existing connection in the network is reconfigured, but not every time in all ways possible for that connection.

Claim 14 : (Previously Presented) The communications system according to claim 13, wherein each connection comprises a main and a standby path, and the reconfiguration by the network management system is constrained in that only the standby path, and not the main path, of the connection is changed.

Claim 15 : (Previously Presented) The communications system according to claim 13, wherein, when first implementing the connection in the network, it is possible

to choose both a route the connection will take and a wavelength on which the connection will be made, the reconfiguration by the network management system being constrained in that only one of the route and the wavelength of the connection is changed, not both.

Claim 16 : (Previously Presented) The communications system according to claim 9, wherein the existing connections in the network switch between reconfigurable and unreconfigurable states, and the reconfiguration by the network management system is constrained to reconfiguration of only those existing connections reconfigurable at the time the request for the connection in the network is made.

Claim 17 : (New) The communications system according to claim 9, wherein a network connection is unreconfigurable if it is a high quality of service connection guaranteed not to experience interruptions.

Claim 18 : (New) The communications system according to claim 9, wherein each connection allocated to the network can be reconfigured until actual commencement of use of the connection.

Claim 19 : (New) The communications system according to claim 9, wherein the network management system comprises a network coordinator for receiving a connection request and a memory for holding said request in a queue for processing by a network resource allocator, wherein the network resource allocator of the network management system is adapted to determine if a predefined route for the requested connection can be used given the current network usage.

Claim 20 : (New) The communications system according to claim 14, wherein the main and standby paths have in common only two endnodes.